

REMARKS

The Office Action mailed August 17, 2005 has been carefully reviewed and considered. Claims 12-20 are previously pending and Claims 12-20 stand rejected.

In the foregoing Amendments, Claims 12 and 18 have been amended. Claims 34-44 have been added to reinstate originally canceled Claims 21-25 and 27-32, which were canceled to place this case in condition for allowance. Support for these amendments can be found in the specification and the claims of the application as filed. No new matter has been added. Claims 12-20 and 34-44 are currently pending in this application.

Applicants thank the Examiner for indicating as allowable the subject matter of Claim 18 if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, Claim 18 has been amended to explicitly incorporate all of the limitations of the base claim and intervening claims, and therefore is now in condition for allowance.

Applicants respectfully request entry of the foregoing Amendments and reconsideration of the present application in light of the amendments above and the remarks below.

The 35 U.S.C. § 112, Second Paragraph Rejection

Claims 12-20 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter applicant regards as the invention. Applicants submit herein a proposed amendment to Claim 12, which is believed to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. Thus, this rejection is respectfully traversed.

The 35 U.S.C. § 102 Rejection

Claims 12, 16-17, and 19-20 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Wang et al¹ (“Wang”). Without admitting that Wang is prior art and reserving the right to establish that it is not prior art, Applicants respectfully submit that this rejection is traversed for the reasons below.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 869 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). *See also*, M.P.E.P. §2131.

Applicants respectfully submit that Wang does not anticipate the presently claimed invention because Wang fails to disclose each and every element set forth in the claimed invention. For example, the independent Claim 12 of the present invention recites in part:

the capture mechanism having a grasping member and an actuator, the actuator being configured to actuate the grasping member in response to a movement of the peripheral device, a coupling mechanism being configured to move in response to the movement of the peripheral device when the peripheral device is engaged by the capture mechanism; (emphasis added)

Wang essentially discloses a system to perform minimally invasive cardiac procedures, which includes a pair of surgical instruments and a pair of robotic arms. See Abstract of Wang. The Office Action, however, alleges that Wang (Col. 12, lines 21-27 and Col. 6, lines 52-56) anticipates the claimed element of “the capture mechanism having a grasping member and an

¹ U.S. Patent No. 5,855,583.

actuator” in Claim 12. See page 4 of the Office Action. Applicants respectfully disagree with this allegation. Wang states that:

The surgical instrument 82 has a first finger 90 that is pivotally connected to a second finger 91. The fingers 90, 91 can be manipulated to hold objects such as tissue or a suturing needle. The inner surface of the fingers may have a texture to increase the friction and grasping ability of the instrument 82. The first finger 90 is coupled to a rod 92 that extends through a center channel 94 of the instrument 82. (Col. 12, lines 21-27)

The controller 46 receives input signals from the handles 50 and 52, computes a corresponding movement of the surgical instruments, and provides output signals to move the robotic arm assemblies 26 and instruments 22, 24. (Col. 6, lines 52-56).

Applicants submit that Wang fails to disclose a capture mechanism (or the surgical instrument 82) that has an actuator. The Office Action, however, asserts that the “controller 46” in Wang is the actuator. See page 4 of the Office Action. Applicants respectfully disagree with this assertion. The specification of the present application states that an actuator is capable of providing force feedback. See page 12 lines 10-11 of the specification.

In contrast, Wang describes the controller 46 that is used to control the movement of the articulate arms 16, 18 and 20. See Col. 6, lines 5-7 of Wang. As the Office Action mentioned, “[t]he controller 46 receives input signals from the handles 50 and 52, computes a corresponding movement of the surgical instruments, and provides output signals to move the robotic arm assemblies 26 and instruments 22, 24.” See Col. 6, lines 52-56 of Wang. As can be seen, the controller 46 defined in Wang can not anticipate the actuator as claimed in the present invention because Wang never discloses or suggests that the “controller 46” can be an actuator and it is not capable of providing, for example, force feedback. Furthermore, Wang also fails to disclose or suggest that the surgical instrument 82 has the controller 46. Accordingly, Wang can not

anticipate the claimed element of “a capture mechanism that has a grasping member and an actuator” in Claim 12.

The Office Action further alleges that Wang (Col. 6, lines 41-46) anticipates the claimed element of “the actuator being configured to actuate the grasping member in response to a movement of the peripheral device” in Claim 12. See page 4 of the Office Action. Applicants again disagree with this allegation. Wang states that:

Each of the master handles 50, 52 which can be manipulated by the surgeon, has a master-slave relationship with a corresponding one of the articulate arms 16, 18 so that movement of a handle 50 or 52 produces a corresponding movement of the surgical instrument 22, 24 attached to the articulate arm 16, 18. (Col. 6, lines 41-46)

Applicants submit that the handle 50 or 52 is not an actuator. As discussed, an actuator is capable of providing force feedback. Wang essentially describes a movement of surgical instrument 22, 24 that is in response to the movement of a handle 50 or 52. In other words, Wang teaches a movement of surgical instrument 22 that is caused by the movement of the handle 50. Contrary to Wang, Claim 12 of the present invention teaches an actuator that it actuates in response to the movement of the peripheral device. More specifically, the present invention discloses an actuator that it actuates in accordance with the movement of the peripheral device. Thus, Wang can not anticipate the claimed element of “the actuator being configured to actuate the grasping member in response to a movement of the peripheral device” in Claim 12.

In summary, Wang neither discloses the claimed element of “a capture mechanism has a grasping member and an actuator” nor teaches the element of “the actuator being configured to actuate the grasping member in response to a movement of the peripheral device.” At least for these reasons, Wang can not anticipate the presently claimed invention as in Claim 12. Accordingly, Claim 12 is patentable over Wang under §102.

If independent claims are valid, the claims that depend from the independent claims should also be valid as matter of law. See Jenric/Pentron, Inc. v. Dillon Co., 205 F. 3d 1377, 1382 (Fed. Cir. 2000). Since Claims 13-17 and 19-20 depend from allowable independent Claim 12, Claims 13-17 and 19-20 should also be patentable over Wang under § 102. Since Claims 34-44 contains similar limitations as Claim 12, Claims 34-44 should also be patentable over Wang.

The 35 U.S.C. § 103 Rejection

Claims 13 and 14 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Wang in view of Sullivan et al.² Without admitting that Wang and Sullivan are §103 prior art and reserving the right to establish that they are not, Applicants respectfully disagree this rejection. According to the Manual of Patent Examining Procedure (M.P.E.P.),

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure.³

Applicants submit that this rejection is moot because, as discussed above, Claims 12 is patentable over Wang and since Claims 13-14 depend from Claim 12, Claims 13-14 should also be patentable as matter of law. As such, this rejection is respectfully traversed.

² U.S. Patent No. 5,746,753.

³ M.P.E.P § 2143.

Information Disclosure Statement

The Information Disclosure Statement (“IDS”) filed on September 14, 2004 were objected as failing to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document or non-patent literature publication. On October 28, 2005, Applicants submitted a portion of references listed in the IDS (filed on September 14, 2004). Applicants is herewith submitting the remaining portion of the references listed in the IDS with this reply except the following four references:

- (1) Kegier, “Surgeons Turn to Surgical Simulation Via Virtual Reality to Practice New Procedures”;
- (2) Merrill et al., “Cyber Surgery: Cutting Costs, Sewing Benefits, Virtual Reality Special Report”;
- (3) Gunsberg, “This Shot Won’t Hurt at All”; and
- (4) Immersion Human Interface Corporation, “Programmer’s Technical Reference Manual: Immersion Probe and Personal Digitizer”.

Applicants are having difficulties to locate these four references and will submit these references as soon as we obtain them. An acknowledgment of receipt of the references submitted herewith and the references submitted on October 28, 2005 is respectfully requested.

Conclusion

Based on all of the above, Applicants believe all claims now pending in the present application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

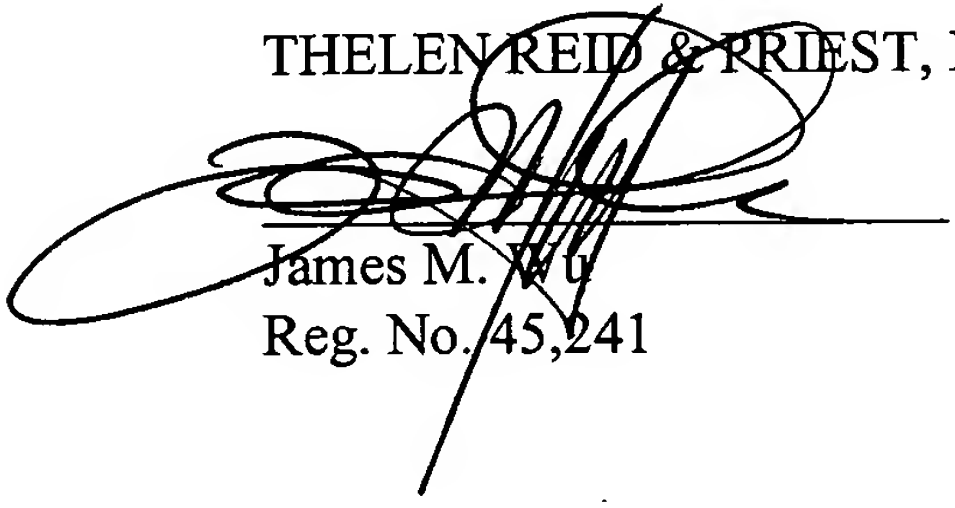
No additional fees are believed to be due at this time. However, please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-1698.

Applicants thank the Examiner for carefully examining the present application and if a telephone conference would facilitate the prosecution of this application, the Examiner is invited to contact Jim Wu at (408)282-1885.

Respectfully submitted,

THELEN REID & PRIEST, LLP

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James M. Wu
Reg. No. 45,241

Thelen Reid & Priest LLP
P.O. Box 640640
San Jose, CA 95164-0640
Tel. (408) 292-5800
Fax. (408) 287-8040